

ABSTRACT OF THE DISCLOSURE

5 A programmer operating in association with a diverse number of implantable medical devices (IMDs) is in a bi-directional operable data, voice and video communications with a remote web-based expert data center. The programmer is in telemetric wireless communications with the IMDs. The data center is equipped to manage the operational and functional aspects of the programmer remotely thus importing expertise to the patient environment. Specifically the communications scheme is scalable and adaptable to enable 10 high-speed interactions between the programmer and the remote center across various communications media. The remote center is able to remotely assess, monitor, evaluate for failure or conduct other performance checks on the programmer to implement a remote solution to those problems. Specifically, by utilizing the robust communication scheme integrated with the remote web-based expert data center, the system enables a real-time 15 deployment of executable software commands to manage the programmer by remotely monitoring, updating software, performing remote repairs or replacement of components and alerting operators to significant problems before they become critical to the optimal performance and reliability of the programmer. 20